I claim:

1. A coupling for attachment to the end portion of a pipe, comprising:

a coupling body to closely receive the end portion of the pipe to be coupled therewith;

a set of first class lever jaw members each having a power arm and a separate weight arm extending from a fulcrum; and

means mounting each lever jaw member of the set of lever jaw members to the coupling body to establish the fulcrum for rotation of each lever jaw member about the fulcrum where rotation of the power arm about the fulcrum causes rotation of the weight arm about the fulcrum to an engaged position or to a disengaged position with respect to the end portion of the pipe when the pipe is received in the coupling body.

2. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the means mounting each lever jaw member and establishing the fulcrum is an axle extending through the coupling body.

3. A coupling for attachment to the end portion of a pipe according to Claim 2, wherein the weight arm extends from the axle within the coupling body and the power arm extends from the axle outside the coupling body so as to be operable by a user.

4. A coupling for attachment to the end portion of a pipe according to Claim 3, wherein the weight arm and the power arm both extend from the axle in approximately the same direction.

5. A coupling for attachment to the end portion of a pipe according to Claim 3, wherein the weight arm is offset from the power arm.

6. A coupling for attachment to the end portion of a pipe according to Claim 3, wherein the position of each lever jaw member is maintained by friction against movement of the lever jaw members.

7. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the end portion of the pipe to be received in the coupling body includes an end and a shoulder facing away form the end, wherein the coupling body extends over the shoulder when the end portion of the pipe is inserted into the coupling body, whereby the weight arms of the lever jaw members engage the shoulder to secure the coupling to the pipe end portion when in engaged position.

8. A coupling for attachment to the end portion of a pipe according to Claim 7, wherein the shoulder is formed by a groove in the end portion of the pipe.

9. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the coupling is secured to the end of a pipe to couple to the end of another pipe.

10. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the coupling joins two pipes in end to end relationship, each pipe having an end portion, wherein the coupling body is adapted to closely receive the end portion of each of the two pipes to be joined in end to end relationship, the set of lever jaw members being located with respect to the coupling body to engage the end portion of one of the two pipes to be joined, the coupling further including a second set of first class lever jaw members each having a power arm and a separate weight arm extending from a fulcrum, means for mounting each lever jaw member of the second set of lever jaw members to the coupling body to establish the fulcrum for rotation of each lever jaw member of the second set of lever jaw members about the fulcrum where rotation of the power arm about the fulcrum causes rotation of the weight arm about the fulcrum to an engaged position or to a disengaged position with respect to the end portion of the other pipe when received in the coupling body, the second set of lever jaw members being spaced from the set of lever jaw members and located with respect to the coupling body to engage the end portion of the other of the two pipes to be joined when the other pipe is received in the coupling body and the lever jaws of the second set

of lever jaw members are rotated to an engaged position, and to disengage the end portion of such other of the two pipes when the lever jaws of the second set of lever jaw members rotate to a disengaged position.

11. A coupling for attachment to the end portion of a pipe according to Claim 10, wherein the means mounting each lever jaw member and each second lever jaw member and establishing the fulcrum is an axle extending through the coupling body.

12. A coupling for attachment to the end portion of a pipe according to Claim 11, wherein the respective weight arms extend from the axle within the coupling body and the respective power arms extend from the axle outside the coupling body so as to be operable by a user.

13. A coupling for attachment to the end portion of a pipe according to Claim 10, wherein the coupling body includes at least one gasket sealing means for sealing around the ends of the pipes to be joined to prevent leakage therefrom.

14. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the coupling joins two pipes in end to end relationship, each pipe having an end portion and a shoulder in the end portion of the pipe, wherein the coupling body is adapted to closely receive the end portion of each of the two pipes to be joined in end to end relationship, the set of lever jaw members being located with respect to the coupling body to engage the shoulder in the end portion of one of the two pipes to be joined, the coupling further including a second set of first class lever jaw members each having a power arm and a separate weight arm extending from a fulcrum, means for mounting each lever jaw member of the second set of lever jaw members to the coupling body to establish the fulcrum for rotation of each lever jaw member of the second set of lever jaw members about the fulcrum where rotation of the power arm about the fulcrum causes rotation of the weight arm about the fulcrum to an engaged position or to a disengaged position with respect to the end

portion of the other pipe when received in the coupling body, the second set of lever jaw members being spaced from the set of lever jaw members and located with respect to the coupling body to engage the shoulder in the end portion of the other of the two pipes to be joined when the other pipe is received in the coupling body and the lever jaws of the second set of lever jaw members are rotated to an engaged position, and to disengage the groove of such other of the two pipes when the lever jaws of the second set of lever jaw members rotate to a disengaged position.

15. A coupling for attachment to the end portion of a pipe according to Claim 14, wherein the coupling body is substantially cylindrical and of a length to extend over the circumferential shoulder of the one pipe of two pipes to be joined end-to-end and over the shoulder of the other of the two pipes to be joined, wherein the set of lever jaws is located at one end of the body and the second set of lever jaws is located at the other end of the body.

16. A coupling for attachment to the end portion of a pipe according to Claim 15, wherein the coupling body includes at least one gasket sealing means for sealing around the ends of the pipes to be joined to prevent leakage therefrom.

17. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the coupling body includes at least one gasket sealing means for sealing around the end of the pipe to be joined to prevent leakage therefrom.

18. A coupling for attachment to the end portion of a pipe according to Claim 17, wherein the end portion of the pipe to be received in the coupling body includes an end, and additionally including a groove in the coupling body for receiving and holding a portion of the at least one gasket and positioned so that the at least one gasket held in the groove contacts the end of the pipe when received in the coupling body.

19. A coupling for attachment to the end portion of a pipe according to Claim 17, wherein the end portion of the pipe to be received in the coupling body includes a sloped end portion, and additionally including a groove in the coupling body for receiving and holding a portion of the at least one gasket, the groove having a sloped surface and being positioned so that the sloped surface of the groove is adjacent the sloped end portion to form a continuous sloped surface and the gasket held in the groove contacts the continuous sloped surface.

20. A coupling for attachment to the end portion of a pipe according to Claim 17, wherein the gasket is an inverted "U" type seal.

21. A coupling for attachment to the end portion of a pipe according to Claim 17, additionally including a groove in the coupling body for receiving and holding a portion of the at least one gasket and positioned so that the gasket held in the groove contacts the end of the pipe when received in the coupling body.

22. A coupling for attachment to the end portion of a pipe according to Claim 17, wherein the gasket is a diaphragm seal.

23. A coupling for attachment to the end portion of a pipe according to Claim 1, wherein the coupling joins two pipes in end to end relationship, each pipe having an end portion, wherein the coupling body is adapted to closely receive the end portion of each of the two pipes to be joined in end to end relationship, the set of lever jaw members being located toward one end of the coupling body to engage the end portion of one of the two pipes to be joined, the coupling further including

a coupling body inner end taper adjacent the other end of the coupling body;

a set of jaw members slidably positioned in the inner end taper of the coupling body so that linear movement of the jaw members toward the end of the inner end taper causes movement of the

jaw members radially inwardly of the coupling body against the end portion of the other of the two pipes to be joined when the other pipe is received in the coupling body; and

means for securing the jaw members to the coupling body.

24. A coupling for attachment to the end portion of a pipe according to Claim 23, wherein the means for securing the jaw members to the coupling body includes linear slots through the coupling body, and bolts extending from the jaw members slidably through the slots.

25. A coupling for attachment to the end portion of a pipe, comprising:

a coupling body to closely receive the end portion of the pipe to be coupled therewith, said coupling body including an inner end taper;

a set of jaw members slidably positioned in the inner end taper of the coupling body so that linear movement of the jaw members toward the end of the inner end taper adjacent an end of the coupling body causes movement of the jaw members radially inwardly of the coupling body against the end portion of the pipe when received in the coupling body; and

means for securing the jaw members to the coupling body.

26. A coupling for attachment to the end portion of a pipe according to Claim 25, wherein the means for securing the jaw members to the coupling body includes linear slots through the coupling body, and bolts extending from the jaw members slidably through the slots.

27. A coupling for attachment to the end portion of a pipe according to Claim 25, wherein the coupling joins two pipes in end to end relationship, each pipe having an end portion, wherein the coupling body is adapted to closely receive the end portion of each of the two pipes to be joined in end to end relationship, the set of jaw members being located toward one end of the coupling body to engage the end portion of one of the two pipes to be joined, the coupling further including

a second coupling body inner end taper adjacent the other end of the coupling body;

a second set of jaw members slidably positioned in the second inner end taper of the coupling body so that linear movement of the jaw members of the second set of jaw members toward the end of the second inner end taper causes movement of the jaw members of the second set of jaw members radially inwardly of the coupling body against the end portion of the other of the two pipes to be joined when the other pipe is received in the coupling body; and

second means for securing the jaw members of the second set of jaw members to the coupling body.